

Appl. No. 10/615,410
Amdt. dated November 19, 2004
Reply to Office Action of August 20, 2004

Amendments to the Specification:

Please amend the specification as follows:

On page 4, between lines 14 and 15, insert --BRIEF SUMMARY OF THE INVENTION--.

On page 6, line 22, insert the following --BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS--.

On page 7, line 21, insert --DETAILED DESCRIPTION OF THE INVENTION--.

On page 11, please replace the paragraph beginning at line 30, and ending on page 12, line 5, with this amended paragraph:

The outer surface **34.3** of the hollow cylinder wall **34.2** of the apply piston **34** and an inwardly facing cylindrical contact surface **28.2** formed by the recess of the circular ring shaped recess **38.3** **28.3** formed in radial direction R are provided adjacent to each other. Between these contact surfaces **28.2** and **34.4** **34.3** there is in the above-described mode and manner provided a guide element/sealing element **38.1**, so that the apply piston is guided slideably supported by the balance piston **34** for sliding in the axial direction ax.

On page 13, please replace the paragraph beginning at line 31, and ending on page 14, line 4 with this amended paragraph:

In contrast to the illustrative embodiment according to the state of the art (Fig. 1) now the cylinder shaped wall **14.3** of the balance piston **14** is not provided radially within the cylinder shaped wall **12.1** of the apply piston support device **12**, but rather in the axial direction between the clutch hub **2** and the cylinder shaped wall **12.1** of the apply piston support device **12**.

On page 14, please replace the paragraphs beginning at line 23, and ending on page 15, line 11 with these amended paragraphs:

As has already been discussed above, during rotating operation parabolic pressure profiles p_k p_A result in the radial direction r along the rotating surfaces **8.6**, **8.7** of the apply piston **8** in the apply piston space **15** and in the equalizing space **16**. Fig. 1c) shows the parabolic pressure profile $p_k(r)$ in the piston space **15**, ~~, which is represented in Fig. 16), Fig. 1d)~~ Fig. 1d shows the parabolic pressure profile $p_A(r)$ in the equalizing space **16**, ~~, which is likewise represented in Fig. 1b)~~.

The pressure profiles p_k in the apply piston space **15** according to Figs. ~~4a~~ **1c** and ~~4b~~ **1d**, on the basis of its design being identical with the apply piston space **35** according to Figs. 2a and 2b, identical to the pressure profile p_k in the apply piston space **35** of the wet clutch **200** according to the state of the art.

In comparison thereto, the apply piston equalizing space **16** in the wet clutch **100** according to the invention is further expanded in the radial direction r . The coil wetted surface **8.7** of the apply piston **8** in the equalizing space **16** is thus, in comparison to the wetted surface **8.6** of the apply piston **8** in the apply piston space **15**, further

extended or expanded in the radial direction. In this further expanded area the pressure p_A^* in the equalizing space **16** will thus further rise. Thus in this case even higher compensation forces F_A^* can occur than those pressure forces F_K , which result on the basis of the pressure increase p_K in the apply piston space **15**.

On page 15, please replace the paragraph beginning at line 24, and ending on page 16, line 11, with this amended paragraph:

If the balance piston **14** is designed and provided in accordance with the invention; then the volume of the oil space **11** is substantially smaller than the oil space **31** according to the state of the art, as can be seen from Fig. 2. From this particular arrangement of the balance piston **14** alone there occurs a supplemental forced guidance of the oil, which supplementally supports the oil transport to the friction plates **4.6 4.6** of the friction pack **3**.

From the state of the art it is known to provide for improvement of the oil transports to the friction plates, **24, 25.1, 25.2, 25.3, 26, 27.1, 27.2** of the friction pack **23**, on the apply piston **28** facing side of the clutch hub **22** a radially inwardly directed oil collecting or retaining ring **30**. An oil collecting ring of this type can be seen for example from the illustrative embodiment according to Figs. 2a) and 2b) representing the state of the art. Via this oil retaining ring **30** there is produced an inner side **22.1** of the clutch hub **22** a fluid ring **37** of oil, which is supplied by oil flung out of the oil space **31**. Thereby the oil is comparatively efficiently guided through the above-described oil channels **29.1, 29.2, 29.3, 29.4** or the like in the clutch hub **22** to the friction plates **24, 25.1, 25.2, 25.3**,

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26, 27.1, 27.2 of the friction pack **23**. A higher oil volume is thereby detoured or bypassed to the clutch by overflowing the collecting ring **30**.

On page 17, line 15, after "8.4", delete "Pressure device" and insert – Cylindrically shaped contact surface--.

On page 17, line 16, delete the whole line.

On page 18, line 9, after the word "piston" insert –space--.

On page 18, line 11, delete "ring" and insert –in oil space 11--.

On page 25, line 1, change "**ABSTRACT**" to --ABSTRACT OF THE DISCLOSURE--.